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RECENT BRAIN SURGERY IN ITS PSYCHOLOGICAL BEARINGS.

BY S. MILLINGTON MILLER, M. D.

IT IS ONLY necessary to glance over the pages of the great American monthlies, (which lead the world,) to learn that the present age is one of splendid material and mechanical improvement. Scarcely a month passes without the publication of some startling invention or of some wonderful amelioration of the material ills of mankind.

But while the advance in engineering, electrical appliances, and other mechanical items of progress, are well known to the population at large, there is another sphere in which achievement has been so remarkable as almost to stagger the imagination, and which is less widely known. Partly from its technical character, and partly because a certain amount of close, serious thought is necessary to understand its tremendous significance.

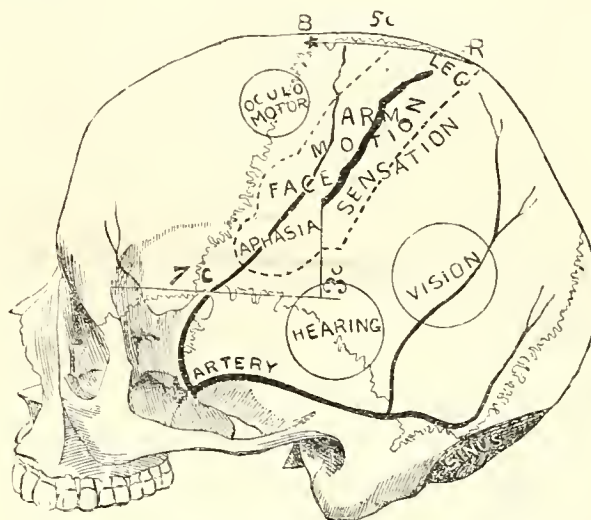
I refer to the increasing dominion over, and modification of, *that entity or those twins*, or whatever else they may be—Brain and Mind.

Even in a period after the middle of this century the brain was regarded as an organ with a single function—the function of thought. It was not supposed to possess any centres of localised action entirely distinct in character and situation. The heart was known as a machine which pumped the blood through the body, and the lungs as a great reformatory institution where its impurities were removed. The stomach and the liver acted as units. Did one thing, each of them, and nothing else.

But within recent years it has been discovered that the brain, besides well-authenticated centres of sight, smell, taste, hearing, etc., has also an endless number of well-defined motor-centres, each of which controls the movement of a strictly limited portion of the human body. One centre produces motion of the face; another motion of the shoulder; another motion of the elbow; another motion of the wrist; and still others—motion of the thumb and of the fingers.

That the subject may be thoroughly understood, it should be stated at the outset that the nervous system of man consists of certain ingoing fibres which carry the impulses of sight, of hearing, of smell, and of taste

to their individual brain-centres. In the grey-matter cells of these centres, by some process at present entirely unknown, the particular sensation thus carried is elaborated into thought, and these thoughts send messages through a certain second set of fibres—connecting sense centres with motor-centres—the grey-matter cells of sense with the grey-matter cells of motion or action. From these latter centres commands are issued through the efferent nerves to the various muscles. Thus the legs, arms, hands, head, etc., are moved.



MAP OF THE HUMAN SKULL, SHOWING LOCATION OF CENTRES OF MOTION AND SENSATION.

I am walking some day, we will suppose, in late Spring, or early Summer, in the woods, or through the fields, and my eye lights upon a bush covered with exquisite *somethings*. An impulse of sense mounts, like lightning, through the optic nerve to the sight-centre in the brain. There a process called thought is carried on; memory is invoked; and that cell, or those cells, as the case may be, decide that the objects which grow on that bush are flowers—wild roses. And by a certain association of ideas the conclusion is also reached that they have a delicious fragrance. Then a command is carried from this sight-centre, along the fibres of connexion to the motor-centres of the arm, hand, and body generally, and these second centres bid me stoop down and pluck the rose, and lift it, and smell it.

This is the general process by which motion of various kinds becomes a more or less immediate result of sensation. And this is about as popular an explanation of the great intricacy of the actions as I can formulate.

If the reader will closely examine the accompanying illustration, showing the now well localised functions of the brain, he will find food for some very lively thought. The broad, wavy black line running almost vertically represents, as he will notice, the "fissure of Rolando," which is the great motor-axis of the brain. I mean to say that it crosses all the various motor points of action in the brain. It is well known that touch is at once the finest and the most indispensable of all the senses. This particular sense has the general name of "Sensation" in the picture.

Darwin's white cats with blue eyes illustrate this fact very nicely. If any one has ever possessed a litter of these animals they will no doubt have noticed that they are, for some time after birth, very imperfectly, if at all, gifted with the senses of sight and hearing. In after life such kittens invariably become blind. Approach such a litter; shout at the top of your voice; make all kinds of extravagant and threatening motions before the eyes of the little animals,—nothing can disturb the serenity of their repose. But blow, gently, across their backs,—moving the fine fur like the bending waves of wheat before the wind,—and in an instant every kitten in that basket is a picture of active, moving life.

Well, if this sense of touch is the most important and the finest of all the senses, we should find it most intimately and most centrally situated as regards the various centres of motion. It only takes a glance at the illustration to show that this is the case. And as a matter of fact, any one can readily understand why this must be so.

A coal has fallen out of the fire on the carpet. Its red hue, indicative of burning heat to the eye, has disappeared. It is growing cold. But it is still quite hot enough to destroy tissue rapidly. I stoop down, very foolishly, and pick it up. In the twinkling of an eye those afferent nerves of my arm and hand have carried a startling message of "fire" to the "sensation" centre in my brain. With equal rapidity a message flashes across the short intervening space to the "hand-centre" of motion. And, ever so much quicker than the wind, the command flies down through neck and shoulder and arm to my hand, "drop that coal." It is done, and though my fingers tingle for some time, there has been no material destruction of my flesh.

Take the centre of sight again. You will notice that it is also very medially located as regards the motor-centres, though not quite so near to them as to the seat of "sensation." This is another instance of

the wonderful prevalence of design in nature and in man. I mean in the building of nature and of man.

I am walking along the street in front of a building that is being torn down, and perhaps beneath some scaffolding. I look up. A brick has escaped the interfering boards, and is falling right down on my head. Again the sense of sight, and again the quick commands which it elicits. What are they? First, "move the head"; second, "protect it with the arm or hand"; third, "run as fast as you can." This is the exact sequence of the muscular actions. And if you will notice the picture again you will see that the motor-centres bear just this proportionate relation, as regards distance, to the centre of sight.

As hearing is a sense which does not require such instantaneous or such admirably correlated muscular action, it will be noticed that its centre is not so centrally located as regards the motor centres. And it will not require any great amount of reasoning to see why it should be placed just where it is.

How have all these facts of sense and motor locality been discovered? Mainly, if not altogether, by vivisection of the brain of the monkey and the dog, and by electric excitation of all the exposed surfaces of the brain, from time to time, until it was learned that touching a certain portion of brain-tissue with the pole of the battery produced action in a well-defined portion of the body. It is now well ascertained that the motor-centres in the human brain are almost identically the same, as regards location, as those in the brain of the dog and monkey. I have had an illustration reproduced of the brain of the latter, showing the various other important fissures and giving the individual and particular motor-centres with more completeness.

What has been the advantage of brain vivisection to humanity? We all know how wave after wave of reprobation has surged over this country and England, from time to time, intended to overwhelm the poor vivisectionists. How all kinds of tear-compelling narrative and of quaintly adroit *argumenta ad homines* have been employed, to prevent experiments upon animals. It ought to be well known, however, and I think it is well known to-day, that animals thus operated upon are as tenderly adjusted and as carefully etherised as the millionaire's daughter, and that just as much watchful care is exercised to mitigate suffering after the operation, and to hasten the animal's recovery. And in the next place, *operations upon the brain are almost absolutely painless*. Isn't it strange that so little suffering should attend the severance of the very *sancta sanctorum* of life and thought. Still, it is so.

And what have these experiments enabled great surgeons to do for suffering man himself? I will try

and explain all the marvellous wonder they have wrought by detailing two operations, performed respectively by Dr. Robert Weir, of New York, and by Dr. W. W. Keen, of Philadelphia.

Case 1. A gentleman thirty-nine years of age had always been perfectly healthy until a certain attack of malarial fever occurred, accompanied with a good deal of pain. One day, as he rose to go to the window, his wife noticed a spasm of the right cheek and neck, which did not involve the arm, nor was consciousness lost. In 1886, (two or three similar attacks having occurred in the interval,) he fell, unconscious, and bit his tongue. These attacks were all accompanied with twitching of the right arm and hand and right side of the face. His memory became impaired and his speech thick. No injury had ever been received on his head, nor was anything abnormal observed even when his head was shaved. Gradually his right hand and arm became weak, and, as a result, his hand-writing degenerated. This weakness of the right arm slowly increased, and along with it a weakness of the right leg, and, as a consequence of the increasing paralysis of his face, "drooling" at the right side of the mouth set in.

Dr. Weir examined him, at Dr. Seguin's request, and both of them reached a diagnosis, chiefly based upon the facts already given, that the man had a small tumor situated as above described, and on November 17, 1887, the skull was opened at the junction of the arm and face centres. This operation was witnessed by Dr. Keen. Nothing abnormal was seen on the surface of the brain. Yet so confident was Dr. Weir of the correctness of the diagnosis that he boldly cut into the brain substance, and from its interior removed a tumor of the size of a hazelnut by means of a small surgical spoon. The man made a perfect recovery. When examined microscopically, the tumor was found to be of a malignant character.

Now just consider what an absolutely fantastic thing that operation was—wonderful in its boldness, more wonderful in its perfect success. Dr. Weir had nothing at all to guide him except certain facts and his ability to reach an accurate idea of the exact position from the various symptoms and the fixed order in which they followed each other. Doubtless he had often experimented upon the brains of dogs and monkeys. And his great experience in that line showed him exactly what impairment of bodily function followed the excitation of certain limited localities in the dog's or monkey's brain. The slightest error in calculation from these facts to his final surgical action would have certainly entailed, not only the possibility of great damage to other sound centres in this gentleman's brain, but also great hazard of the very life it-

self of the patient. This gentleman recovered rapidly and entirely, and lived for four years without any recurrence of the disagreeable symptoms above described. But then the tumor, which was malignant (and malignant disease is a vice of the whole system), returned, and finally destroyed his life.

Case 2. This case can be found in the records of the Orthopædic Hospital and Infirmary for Nervous Diseases in Philadelphia, Record Book, S. I., p. 123. A young girl of about twenty-one was admitted to the infirmary in October, 1891. She said that her attacks of epilepsy from which she had suffered for two years and a half, always began in the right thumb. This fact having been verified, it was decided to remove the centre for the thumb, for the same reason as in the last case, i. e., to stop the very beginning of the fit. It was especially desired to remove only the centre for the thumb, and not that for the hand, in order not to interfere more than was necessary with the usefulness of her hand, upon which she depended for her support, as she was a mill girl. This was an unusual and minute attempt at localisation, and a very severe test of the accuracy of the mapping of the brain by vivisection. On October 6, 1891, the "fissure of Rolando" was first located, and a disk of bone an inch and a half in diameter was removed, the centre of it being two and five eighths inches to the left of the middle line. Both the bone and the brain, when exposed, seemed to be normal. The fissure of Rolando was seen crossing the middle of the opening, downward and forward. By the battery the brain was stimulated at certain definite points until the thumb-centre was recognised, and also the face-centre, which lay somewhat below it, and the wrist-centre, which lay—as it ought by experiments on the monkey's brain—a little above it. Each of these centres was recognised by the movement of the part supplied by it (thumb, face, wrist) when the centre was touched by the poles of the battery. Stimulation of the thumb-centre produced a *typical epileptic fit*, such as she had suffered since her admission, beginning in the thumb, as she had asserted. The portion of the brain corresponding to the thumb-centre, a piece about half an inch in diameter, was removed, and by the battery it was determined that the portion removed was the whole of the thumb centre. She recovered promptly and without disturbance from the operation. It was necessary in this case to be unusually accurate, and not to remove any portion of the brain other than the centre for the thumb, and for three reasons: First, if too much were removed upward and backward, the wrist and fingers would be paralysed; second, if too much were removed forward, the muscles of the face would be involved; third, a little further down lies the centre for speech, and had this part of the brain been injured,

this important faculty would have been destroyed, thus producing serious and unnecessary trouble.

Note now the accuracy of experimental cerebral localisation. As soon as the patient had recovered from the ether and was in suitable condition, her ability to move the face and hand was attested. All the muscles of the face were entirely intact, and could be moved with absolute ease. Her speech was also unaffected.

Now just consider for a moment what a thought-exciting operation this very simply described "feat" really was. It would not be very hard—if we likened the brain to an apple, and if we were convinced that a certain limited portion of that apple were rotten, by its manifestations on the skin, to cut into the substance of the fruit and remove carefully and absolutely every whit of the discolored tissue. We would have the eye to guide in the operation. But in this instance and in this operation upon the substance of the brain, there was no such *visual* assistance. Had there been, he were a poor surgeon who could not with his scoop remove all that was defective and exactly all—and perpetrate no encroachment upon sound brain-substance.

But the apple and its rotten portion fails utterly to convey an explicit idea of just what a marvellous thing was done in this instance. We will liken the human brain again to an apple. And we have ascertained, by certain scientific experiments,—no matter what,—that there is a certain well defined portion of that apple which is bitter to the taste. It is only this bitter part that must be removed. Not an *iota* of the sweet fruit-flesh must be removed. But all of the bitter part has to come away. And there are tremendous penalties inflictible upon the cutter if he removes more or if he removes less; *he must remove only what is bitter*.

And this is just what Dr. Keen did to perfection. If he had left any of the diseased thumb-centre behind, there would have been an uninterrupted sequence of mitigated epileptic attacks—not so severe, perhaps, still prevalent. If he had removed any portion of the sound surrounding brain-substance, there would have been paralysis of the fingers—permanent paralysis—following a slip on that side; and permanent paralysis of the elbow, or shoulder following a slip upon that.

Now do you know of anything more wonderful in its microscopical exactness than this operation in the whole realm of modern mechanical advance?

The results of these operations on the brain have had some very curious tendencies. The operators have found (I should have stated previously that these sense and motor-centres exist *in duplicate* in the human brain, that is, that there is one of each for each side of the body) that the paralysis of motion which attacks certain limited parts of the body immediately after the removal of brain-substance, while marked at first, soon

begins to disappear, and in time, for some marvellous reason, is almost as perfect—I mean the motion is almost as perfect—as it was before the operation.

Now what is the exact significance of this? Does it indicate that the brain—as a healthy, constantly developing and self-propagating body—has deliberately, though gradually, supplied a new motor-centre in the place of that removed? We cannot tell. The only way in which we could find out would be by means of a *post-mortem* performed upon that patient, for instance, whose thumb-centre had been removed, and whose thumb had in time reacquired its power of motion, and who had later died a natural death. And this field is entirely too new a territory for any such instances of death naturally succeeding such operations to have occurred.

But then there is another way of looking at the subject. What is known as the Vicariate, or "Mutual Aid Society of the Senses" is a well established, physical law. I mean to say that when one sense is lost the other senses seem to struggle forward with absolutely headlong haste to act as a kind of crutch to their disabled sister. The deaf child learns to hear with its eyes. The blind child learns to see with its fingers.

Again, I want to call your attention to the prevalence of this "Vicariousness," even in the physical tissues of the body. One eye becomes blind, from injury or disease. In a short time the powers of the other eye seem to be doubled, and soon the man or woman has just as good sight to all intents and purposes as they had before. Or one arm, or one leg, is amputated. It would seem as if the very cutting of the knife acted as a stimulant to the muscle-cells in the opposite member. And the one leg, or the one arm, of the maimed man becomes able in a very short time to bear twice as much weight, or to lift twice as much weight, as it did or could when it had a fellow member to help it in almost every action. It is not at all improbable that this same "Vicariousness" exists in the brain, and that the centres of one side (when those of the other are removed or destroyed) find or build new fibres of connexion to the other side of the organ. And that these fibres in some way become continuous with the efferent nerve on the disabled side.

Some very remarkable operations have been performed on animals which may hereafter produce very important results. Two dogs have been etherised at the same time, and identical portions taken from the brain of each dog and transferred to that of the other dog. These portions of brain-substance, thus transplanted, have flourished in the new soil and have at least caused no disintegration of brain action. It is as yet a problem as to whether the brain-tissue of lower animals can be transferred to the brain of man, and whether after it has established itself in its new site it

will properly perform its functions. The motor centres of animals are the only ones which can be so transplanted, for thus far the sense-centres of animals have not been found to be identical with those of man.

In closing, I would refer to the very remarkable case reported by Dr. McEwen, of Glasgow. This was that of a man who suffered from "psychical blindness," or "mind blindness." His sense of sight was not impaired, but his mind was not able to translate what he saw into thought. Dr. McEwen located the lesion in the "angular gyrus," and found, on removing a button of bone, that a portion of the inner layer of this bone had become detached and was pressing on the brain. One corner of it was imbedded in the brain-substance. The button of bone was removed, and after detaching the splinter, replaced in its proper position. The man recovered his health and all his faculties.

SCHOLAROMANIA.

A SCHOLAR is a man who has been trained in schools and devotes his life to the investigation of subjects, which, when firmly established, are again to be taught in schools. Thus the word is applicable, not so much to students of the natural sciences, as to men of letters, to historians, and philologists passing their lives in the study, the classroom, and library. The profession of the scholar is one of the very highest and noblest, for scholarly research deals mainly with mental facts which are, as it were, the essence of life: the records of the past, the old languages, and the historical facts of bygone ages embody the very souls of our ancestors.

While our opinion of a genuine scholar can scarcely be too high, we frequently meet in life scholars that are warped. There are schoolmasters who cannot understand how their model pupils prove failures in life, while the bad boy makes a great hit; and there are professors whose learnedness consists in a kind of mental library-dust that has settled upon their souls. Wilhelm Busch, the German humorist, calls a certain type of historians, scavengers who collect the offal of the past.

It is the constant indoor life, the lack of acquaintance with the real needs of practical life, and the close confinement to a special mode of work, that tends to make scholars one-sided, and if professional pride and personal vanity are added, a peculiar disease originates, which, in one word, we call *scholaromania*.

The main tenor of scholaromania is a dim notion, not always clearly pronounced, that the world exists for the sake of the scholar, and not the scholar for the sake of the world. The scholaromaniac declares that science must be pursued for science's sake alone, textual criticism being an end in itself. No intellectual aspirations have a title to existence, except scholarly

inquiries, and all books that are not historical or philological are worthless chaff.

Genuine scholars are rarely scholaromaniacs, for their horizon is not limited; they, as a rule, have seen the world that lies beyond the classroom, and they know that scholarship is not an end in itself, but that it serves some definite and very important purpose in the world at large. It is exactly this insight in which the scholaromaniac is lacking.

Such were my thoughts when I read a review by Prof. J. Estlin Carpenter on *The Gospel of Buddha*. Professor Carpenter is a scholar, but he apparently suffers from scholaromania, for he condemns the book because the treatment of the subject is not in his line; it is neither philological nor historical, but serves another purpose. Since the book does not comply with the demands of the scholarly Professor, he puts it down as worthless "stuff."

Here is his critique of *The Gospel of Buddha*, which appeared in the latest issue of *The New World*:

"This volume belongs to a class of well-meaning but wholly misleading books. The compiler has read diligently, but without any perception of the historical development of the religion which he endeavors to exhibit. In a series of one hundred sections he attempts to portray the life and the teaching of the Buddha. The bulk of his material, so he informs his readers in the preface, 'is derived from the old Buddhist Canon.' Every student of Buddhism knows that the sacred collections vary in different countries, not only in bulk, but in age and in doctrine. Of this fundamental fact Dr. Carus takes no notice, though he admits the existence in Buddhism of innumerable sects. They are distinguished, he says, mainly by peculiar superstitions or ceremonial rites; he ignores the far more significant differences of metaphysical and ontological speculation. Accordingly, he places side by side extracts from books separated by hundreds of years in date and by still wider intervals of philosophic thought, as though they all alike represented the teachings of the founder of Buddhism. He describes this process as the arrangement of the 'Gospel of Buddha' into harmonious and systematic form, and claims to take up 'an ideal position upon which all true Buddhists may stand as upon common ground.' Who would accept a Gospel of Christ compiled from writings of the first, fourth, and thirteenth centuries, let us say, of our era? A table of reference at the close of the volume does indeed enable the student to track most of the passages cited; but there is no indication that the sources thus enumerated are of the most diverse origin, and in many cases destitute of all historical value for the purpose for which they are here employed; and nothing can justify the strange amalgamation of fragments of the most various ages within the same section, as though they represented continuous teaching. Nor does it seem to us excusable to prefix pious hymns or add explanatory tags of the compiler's own composition in a book that professes to be a historical summary. Who that knows anything of the real significance of Gotama's teaching can tolerate such stuff as this: 'Buddha is the truth; let Buddha dwell in your heart. That of your soul which cannot or will not develop into Buddha must perish, for it is mere illusion and unreal. You can make your soul immortal by filling it with truth.'

"The compiler has been struck with the ethical nobleness of many Buddhist sayings. His spirit is excellent, but his method is execrable."

It is a matter of course that the picture I have drawn in *The Gospel of Buddha* is not historical in the sense in which the word "historical" is commonly used. The collection which I have made is not restricted to "the teachings of the founder of Buddhism," and I have made no attempt at critically sifting that which is well authenticated from that which is legendary. That may be madness, in the eyes of a scholaromaniac, but there is method in it; and Professor Carpenter should have found it out himself. I am not quite so ignorant as Professor Carpenter thinks, and possess sufficient scholarly training to distinguish between historically reliable and unreliable accounts. But I embodied with good purpose much that a historian would have to reject. And yet I can claim that the picture of Buddha, as it appears in *The Gospel of Buddha*, is not unhistorical. It is historical in a higher sense of the word, for it represents Buddha, such as a tradition of two thousand years has moulded him, as he lives to-day in the minds of some of his noblest followers.

Buddha, such as he lives in the imagination of the world, is a prince, the son of a powerful king; but in fact, Gautama Shâkyamuni who is now worshipped as Buddha, was the son of a wealthy land owner. In the same way Christ is David's son, and any Gospel which would represent him as the presumable son of a Galilean carpenter of Nazareth, as probably being of very humble ancestry, would not depict Christ such as he lives in Christian tradition. There is a difference between Christ and Jesus, and there is the same difference between Buddha and Gautama.

The scholarly Professor does not appear to be at home in the textual criticism of the New Testament. The Gospel according to St. John, which must be recognised as genuinely Christian, possesses little historical value; it does not describe Jesus of Nazareth as he really lived and moved about. Yet, in spite of Professor Carpenter's opinion that no one would accept a Gospel of Christ compiled without historical critique, (for that is the purport of his remark), the Gospel according to St. John has become the most valuable sacred book of the Church; and deservedly so, for, indeed, it possesses an exceedingly high historical value in so far as it helped to make history. It depicts, not Jesus, but Christ, such as he lived in the hearts of the early Christians of Asia Minor.

The Old Testament, the Gospel of the Israelites, is actually "compiled from writings separated by hundreds of years in date," and embodies a great variety of philosophical thoughts, which are often not even harmonious.

Any one who wishes to read a Christian Gospel should read the Gospel according to St. John, but any one who wishes to know the historical facts concerning

Jesus must study the works of those theological scholars who have critically investigated the subject; the most comprehensive statement being Prof. H. J. Holtzmann's text-books for students of the New Testament.¹

In the same way, any one who wishes to know the historical facts about Gautama Shakyamuni must consult Oldenberg's well-known book on *Buddha* or Rhys Davids's *Manual of Buddhism*. And any one who wants to read the sources of the old Buddhism must study the old Pâli texts, which, with the co-operation of Professor Carpenter, become every year more accessible to the Western world.

Professor Lanman sent me a few months ago advance sheets of a book on *Buddha and Buddhism*, by Henry Clarke Warren, which contains the literal translation of such passages as I utilised in *The Gospel of Buddha*, and I advise every one who has read *The Gospel of Buddha* to acquire Mr. Warren's book. Mr. Warren's book is in many respects similar to *The Gospel of Buddha*, but it differs in one point which is of paramount importance: it serves another purpose.

On reading the original records and comparing them with my version in *The Gospel of Buddha*, it will be found that while I remained faithful to the spirit of the founder of Buddhism, and while, at the same time, I considered the evolution of his doctrine in both schools, the Hinayâna, so called, and the Mahâyâna, I introduced certain changes, which, slight though they may be, are not without consequence. They were made with a definite purpose, and are neither errors nor adulterations. They are purifications, pointing out the way of reform in the line of a higher development of Buddhism,² which is actually represented in Buddhist countries, in the same way as there have always been advocates of reform and progress in the various Christian churches. *The Gospel of Buddha* is not a representation of Buddhism in its cradle, but it represents BUDDHISM UP TO DATE, in its nobler possibilities. This was my aim, and if I failed in it, let the critic speak out boldly. But there is no sense in denouncing the book because it is not such a work as Professor Carpenter would have written.

No better evidence, that I have succeeded at least to some extent, in my aspiration, could be given than the fact that a Japanese edition of *The Gospel of Buddha*, translated by T. Suzuki, appeared almost immediately after the publication of the English edition.³

¹*Hand-Commentar zum Neuen Testament*, containing *Synoptiker*, and *Apostelgeschichte*, and *Lehrbuch der historisch-kritischen Einleitung in das Neue Testament*, the former reviewed in Vol. II, No. 2, the latter in Vol. III, No. 1, of *The Monist*.

²For a brief account on the reform movement of the Japanese Buddhism see Busse, *Mitteilungen der Deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens in Tokio*, 50. Heft, pages 439-512.

³While going to press, I am informed that Mr. Kakichi Ohara, of Otsu, Omi, editor of the *Shi-Do-Kwai-Ho-Koku*, which means "Journal of the Society for the Propagation of the Doctrine of Enlightenment," has undertaken to translate *The Gospel of Buddha* into Chinese.

H. R. H. Prince Chandradat Chudhadharu, the chosen delegate of Siamese Buddhism at the World's Religious Parliament, writes on the receipt of advance sheets of the book :

"... As regards the contents of the book, and as far as I could see, it is one of the best Buddhist scriptures ever published. Those who wish to know the life of Buddha and the spirit of his dharma may be recommended to read this work which is so ably edited that it comprises almost all knowledge of Buddhism."

The *Mahā-bōdhi Journal* of Calcutta, edited by H. Dharmapala and representing Ceylonese Buddhism, republished a number of chapters from *The Gospel of Buddha* and called attention to it in editorial notices ; while a Japanese priest of rank, the Right Rev. Shaku Soyen of Kamakura, writes in an appreciative letter :

"Your valuable book rightly claims to be the mother of Truth. We, the followers of Buddha, nay of the Truth, cannot but sympathise with your noble aspirations."

Prof. Carpenter seems to imagine that the past exists only for the historian, and the old Pāli texts have no other use than to be edited and translated, or critically commented upon. To him the records of the past are mere material for philological exercises. To me, while writing *The Gospel of Buddha*, the editing of the Dīgha Nikāya and other Buddhist Suttas is mere material for a practical kind of work which finds its purpose in the religious needs of the living present.

The hod-carrier hoots at the mason ; for he thinks that hod-carrying alone is legitimate work.

I have expressly declared in the preface that "the present volume is not designed to contribute to the solution of historical problems," but it "has been written to set the reader athinking on the religious problems of *to-day*"; it is intended "to become a factor in the formation of the future," and the hope is expressed that "it will serve both Buddhists and Christians as a help to penetrate further into the spirit of their faith, so as to see its full width, breadth, and depth."

In consideration of these statements made in the preface of the book, it is more than a gross neglect, it is a misrepresentation on the part of my critic, to declare that *The Gospel of Buddha* "professes to be a historical summary."

How often has the author of the fourth Gospel been reviled, because his work is not historical in the sense which we expect of the books of modern historians! But how unfair is the reproach! St. John (or whosoever wrote the fourth Gospel) was no historian and had no intention of writing history. He told the life of Jesus in the light of Philo's Logos-conception. He cared little for the correctness or critical verification of details, but he was imbued with the spirit of Christianity, which he wedded to the philosophy of his age. I

have endeavored (as stated in *The Gospel of Buddha*) "to treat the material about in the same way as the author of the fourth Gospel of the New Testament used the accounts of Jesus of Nazareth," the sole difference being that the author of the Gospel of St. John impersonates one of his favorite saints, which was quite a common method in the time in which he lived, while I have avoided anything that might appear as a mystification of the public, and have openly given an account concerning both the sources of the book and the purpose for which it has been written. The avoidance of a critical attitude in the Christian Gospel writers is instinctive, while in my Buddhistic Gospel it is deliberate.

What shall we say of a reviewer who gives a false coloring to the character of a book, disregarding all that has been said in its preface, and then condemns it, because it is not what he wants it to be, by speaking of the book as "such stuff," and calling its method of presentation "execrable"? The review is unworthy of the dignity of that noble old institution in which Professor Carpenter is employed as a teacher ; it is unworthy of genuine scholarship, and unworthy also of the magazine in which it has been published.

But obviously Professor Carpenter's strictures simply prove his own miscomprehension, for which I can find no other excuse than the myopic pedantry of a scholaromaniac, who, unacquainted with the real problems of life, imagines that no books on the past can be written except historico-critical investigations.

P. C.

CORRESPONDENCE.

"THE OPEN COURT" DENOUNCED AS LEARNED NONSENSE.

To the Editor of The Open Court :

THE wisdom of this world is runing mad. "Truth," said the great Voltaire, "has inalienable rights. Just as it is never out of season to search for it, so it can never be out of season to defend it." I wish to say, the great mass of humanity are the recipients of profound ignorance. And, many of those who are endeavoring to enlighten the common heard, are themselves the embodiment of ignorance. I am tired and weary of so much learned nonsense ; but what dose it avail ? I want you to be candid with me, and pleas explain why you publish *The Open Court* ; is it to lead men out of ignorance into abisolute knowledge, or is it to disseminate ignorance ? [1] In fact, what do you mean by such garbage and stuff as the following : "We yearn for life, and we are anxious to insure the immortality of our soul." [2] I would ask ; have you not life already ? If so, why yearn for that which you already possess ? We read in the "Book of fable" "He that believeth on me, though he wer dead, yet shall he live." Then again, the wise man said : 'consider the estates of the sons of men ;' "For that which befalleth the sons of men befalleth beasts : even one thing befalleth them : as the one dieth so dieth the other ; yea, they have all one breath ; so that a man hath no preeminence above a beast ; for all is vanity. All go unto one place. all are of the dust, and all turn to dust again. Who

knoweth the spirit of man that goeth upward, and the spirit of beast that goeth downward to the earth? (The fool of course) (Eccl. iii, 19-21). For to him that is joined to all the living there is hope; for a living dog is better than a dead lion. For the living know that they shall die; but the dead know not anything, neither have they any *more a reward*; for the *memory* of them is *forgotten*. Also their love, and their hatred, and their envy is now perished; neither have they any more a portion forever in anything that is done under the sun" (ix, 4-6). [3]. Do you believe this? What do you wish to convey by the phrase: "Set me as a seal upon *"thine heart,"* as a seal upon thine arm" etc. Is the "heart" the organ of individuality, or, is it the organ by which the blood is regulated in its flow through the arterial and venus system? You say we are "set as seals upon the *heart* and as seals upon the arm of Him to whom we all shall be gathered together with our fathers, and in whom we continue to be "after death" as living citizens of the Great Spirit Empire, of that spiritual All-being who represents the coming of the kingdom of heaven which is being built up in the *hearts* of men." Let me ask you here with all honesty and kandor, can a kingdom be built up in the heart of men? Is the heart the organ and seat of intelligence, sympathy, love or emotions? [4] Please answer this, and state how much science, wisdom and learning, it requires to think and pen such consimate nonsense. How much will the readers of *The Open Court* learn—how much will they be benefited by such logic as you have dealt out in the foregoing? Once more, where is heaven, and what dose heaven mean in the strick sense of the term? Is it not an abstrack noun, meaning in gramatical parlence, a condition and nothing more? You say, "Let facts speak. I say so too. But how much facts do we find in your statements? Nothing but wild and fare fetched fancies of a human mind, falsely cultivated in modern lore. Do you or any living human being absilutely know any thing about the immortality of man? If you do, let us hear or have the facts, and not fancies generated in idle speculation and vain hypothesis.

Yours for the love of truth, and the advancement of human wisdom.
S. MURPHY, M. D.

P. S. I hope you will publish this communication and make your reply. If I am in an error, I hope to be set right. Criticism, is the mother of sound wisdom. Let us lay aside heathemism and all false phraisiology. Let us lay the foundations for a higher and nobler tipe of mankind.
S. M.

ATCHISON, KANS.

[1. We publish *The Open Court* to set people athinking on the religious problem and trust that some of our readers will find, as we do, a solid basis for religion in science.

2. By "immortality" we understand the continuance of life. It is quite true that we have life now, but having life we are anxious to preserve it in that form which we have in the course of evolution laboriously obtained.

3. The Solomonic passage concerning the common fate of beasts and men after death is well known to us, and we have quoted it in an article on "Immortality and Science."¹

As to the continuance of our loves and hates, our aspirations and ideals, and all those features of our being which constitute what is called soul, we differ from Ecclesiastes. The dispositions of our spiritual existence are transferred to posterity by heredity, example, and education. They remain a factor in the world of life and constitute that immanent immortality which can be denied only by those who misunderstand the proposition or are blind to the facts upon which the doctrine of evolution is based. Evolution is possible only through the hoarding up of the souls of the past and utilising the experiences and adaptations of bygone ages for the struggles of the living present.

¹*The Open Court*, p. 3023, republished in *Homilies of Science*, p. 175.

4. Our correspondent announces himself on his letterheads and envelopes as a doctor and director of an "Electro-Hydro-Mesopathic and American Health Institute," that "opens the doors to health." This may be the reason for his objection to the allegoric expression "heart" in the sense of "sentiment,"

Dr. Murphy's correspondence would have lost a great deal of its originality if we had altered his orthography. So we let him write "absilute," "consimate," "strick," etc. He has read and returned the proof.—ED.]

IMMORTALITY.

BY VIROE.

Return to the dust whence thou camest;
O, body of mine to the dead;
O, taper that flarest and flamest,
To end with the fuel that fed.

Restore, O my soul, the lost jewel;
Arise from the gloom of the dead;
The taper that ends with its fuel
Shall live in the light it has shed.

NOTES.

The latest statistics of India show that among the inhabitants of the country there is one convicted criminal to every 274 European Christians, to every 509 Euro-Asiatics (the children of European fathers and native mothers), to every 709 native Christians, to every 1361 Hindu Brahmans, and to every 3787 Buddhists. Accordingly, as a matter of fact, European Christians furnish comparatively the greatest amount of criminals and Buddhists the fewest.

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CONTENTS OF NO. 395.

RECENT BRAIN SURGERY IN ITS PSYCHOLOGI-

CAL BEARINGS. S. MILLINGTON MILLER..... 4431

SCHOLAROMANIA. EDITOR..... 4435

CORRESPONDENCE.

The Open Court Denounced as Learned Nonsense.

[With Editorial Comment.] S. MURPHY, M. D..... 4437

POETRY.

Immortality. Viroe..... 4438

NOTES..... 4438